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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/785,048

02/25/2004

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05/25/2010

Juan Carlos A. Marquez  
c/o Stites & Harbison PLLC  
1199 North Fairfax Street  
Suite 900  
Alexandria, VA 22314-1437

EXAMINER

NGUYEN, DUSTIN

ART UNIT

PAPER NUMBER

2454

MAIL DATE

DELIVERY MODE

05/25/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/785,048	DATE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	DUSTIN NGUYEN	2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 16 and 17 are presented for examination.

#### ***Claim Objections***

2. Claim 16 is objected to because of the following informalities: the claimed language of "a first mobile terminal of the at least one mobile terminal" is not clear explained. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maufer et al. [ US Patent No 7,684,440 ], in view of Firestone [ US Patent No 6,965,646 ].

5. As per claim 1, Maufer discloses the invention as claimed including a data delivery system including at least one mobile terminal and a data delivery server connected to the at least

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one mobile terminal via a network for delivering IP packets having payloads with data packets recorded internally therein to the at least one mobile terminal [ i.e. method for determining a non-standard frame size that is useable by the network element ] [ Figure 1; and Abstract ],

wherein a first mobile terminal of the at least one mobile terminal includes an application module issuing a request for data delivery to the data delivery server and a search packet sending module sending ping packets to the data delivery server as search packets [ i.e. sending MTU probe to target station to discover the maximum frame size ] [ 204, Figure 2; col 4, lines 42-58 ], each ping packet having a different packet size [ i.e. sending second non-standard MTU size that is adjusted from the first non-standard size ] [ 206, Figure 2; and col 4, lines 60-col 5, lines 7 ],

wherein the data delivery server includes a Search packet detecting module for detecting a search packet sent from the first mobile terminal and received by the data delivery server and for determining a maximum size for a single IP packet to be sent to the first mobile terminal based upon a packet size of the detected search packet [ i.e. determining the maximum frame size that can be sent by the sending station and received by the target station when the target station replies in response to MTU probe ] [ 332, 350, Figure 3; col 7, lines 26-54; and claim 1 ].

Maufer does not specifically disclose

wherein the data delivery server includes a packet generating module for determining a total number of data packets to be stored in a payload of the single IP packet based upon the maximum size for the single IP packet and for storing a set of data packets into the payload of the single IP packet, the set of data packets being of the total number of data packets determined by the packet generating module so as to prevent fragmentation of the single IP packet.

Firestone discloses wherein the data delivery server includes a packet generating module for determining a total number of data packets to be stored in a payload of the single IP packet based upon the maximum size for the single IP packet and for storing a set of data packets into the payload of the single IP packet, the set of data packets being of the total number of data packets determined by the packet generating module so as to prevent fragmentation of the single IP packet [ i.e. the segmentor will create network packets that have as many bytes as possible without going over the MTU size ] [ Figure 3B; col 8, lines 42-55; and col 10, lines 63-col 11, lines 8 ].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Takahashi and Firestone because the teaching of Firestone would enable to determine the proper size for information to be transmitted without reducing or lowering the transmission efficiency.

6. As per claim 17, Maufer discloses wherein, upon each sending of a ping packet to the data delivery server, the search packet sending module waits for an Internet Control Message Protocol (ICMP) packet undeliverableness message corresponding to the ping packet and, for each received ICMP packet undeliverableness message corresponding to the ping packet until no ICMP packet undeliverableness message corresponding to the ping packet is received, the search packet sending module resizes and resends the ping packet [ i.e. repeat the peer MTU discovery process and ICMP frame can be used as a PMP ] [ Figure 3; and col 8, lines 66-col 9, lines 28 ].

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dustin Nguyen/  
Primary Examiner, Art Unit 2454